

ORAL PRESENTATION

HISTORIC PHOSPHORUS LEVELS IN LAKE ERIE MEASURED BY DIATOM INFERRED PHOSPHORUS

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Phosphorus (P) levels in Lake Erie have become a matter of government concern since the passage of the Clean Water Act in 1972. There has been even greater focus on P in the lake since 2014 when 500,000 residents of Toledo, Ohio lost water for two days when their treatment facility was overwhelmed by microcystin toxins. How much P in the lake water is acceptable is debatable. How much P was historically in the lake water is unknown before monitoring began in the 1970s. Here we examine historic levels of P in Lake Erie based on diatom inferred P from samples collected from a core collected in the central basin of Lake Erie in 2011. We also assess if the goal of microcystis abatement might be met given current P target levels for the lake. The information presented is extracted from a broader paleolimnological study of Lake Erie.